October 22, 2009

Via Fax (571) 273-1438

To: Examiner Sylvia MacArthur

Re: Interview Request of Application Serial No. 10/680,656
FOR INTERVIEW ONLY--- purposed claim amendment

Enclosed please find purposed claim amendment for your review. Please note that the claim amendment as attached herein is used for review and discussion only. After your review, we will be waiting for your phone to discuss your comment. If you have any questions, please don't hesitate to contact the undersigned at 732-383-1398 or Keith Taboada at 732-383-1389. Thank you.

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Application Serial No. 10/680,656 (APPM/1571C3) proposed claim amendment

1. (Currently Amended) A tandem vacuum processing chamber, comprising:

a chamber body having a bottom, an outer sidewall and an interior sidewall; and

~~an annular pumping channel positioned in the interior sidewall of~~ a first processing region and a second processing region, wherein the first and second processing regions are defined in the chamber body and bound by the interior sidewall, the outer sidewall, and the bottom, the first and the second processing regions each comprising:

a single substrate transfer port formed through the outer sidewall of the chamber body;

a substrate support assembly centrally positioned in each of the first and second processing regions;

a first gas distribution assembly positioned above the first processing region; ~~and~~

a second gas distribution assembly positioned above the second processing region; and

an annular pumping channel positioned in the interior sidewall of the first and the second processing regions, wherein the annular pumping channel is vertically positioned above an upper surface of each substrate support assembly and below a lower surface of each gas distribution assembly.

2. (Original) The processing chamber of claim 1, wherein the first and second gas distribution assemblies each comprise:

a gas distribution manifold in fluid communication with a gas supply; and

a showerhead positioned between the gas distribution manifold and the substrate support assembly.

3. (Original) The processing chamber of claim 2, wherein the showerhead is manufactured from a material that conducts radio frequency energy.

4-5. (Cancelled).

6. (Previously Presented) The processing chamber of claim 1, further comprising a vacuum source in fluid communication with the annular pumping channel of the first and second processing regions, the vacuum source being configured to cooperatively control the pressure in the first and second processing regions.

7. (Previously Presented) The processing chamber of claim 1, wherein the annular pumping channel of the first processing region is in fluid communication with the annular pumping channel of the second processing region.

8. (Cancelled)

9. (Currently Amended) A tandem vacuum processing chamber, comprising:

a chamber body having a bottom, an outer sidewall and an interior sidewall; and

first and second processing regions defined in the chamber body and bound by the interior sidewall, the outer sidewall, and the bottom;

a cylindrically shaped removable liner positioned in each of the first and second processing regions adjacent the interior sidewall, the first and the second processing regions each comprising:

a single substrate transfer port formed through the outer sidewall of the chamber body;

a substrate support assembly centrally positioned in each of the first and second processing regions;

a first gas distribution assembly positioned above the first processing region; ~~and~~

a second gas distribution assembly positioned above the second processing region; and an annular pumping channel positioned in the interior sidewall of the first and the second processing regions, wherein the annular pumping channel is vertically positioned above an upper surface of each substrate support assembly and below a lower surface of each gas distribution assembly.

10. (Original) The processing chamber of claim 1, wherein the first processing region is in fluid communication with the second processing region through a conduit.

11. (Original) The processing chamber of claim 10, wherein the conduit provides the same pressure in each of the processing regions.

12-20. (Cancelled)

21. (Previously Presented) A tandem vacuum processing chamber, comprising:

a chamber body having a bottom member and an interior wall extended from the bottom member;

first and second annular processing regions defined in the chamber body and bound by the common interior wall and the bottom member;

a first gas distribution assembly positioned above the bottom member and defining an upper boundary of the first annular processing region;

a second gas distribution assembly positioned above the bottom member and defining an upper boundary of the second annular processing region;

a substrate support member positioned in each of the first and second processing regions, an outer portion of the substrate support member being parallel to an annular sidewall defining a lateral boundary of each of the processing regions;

an annular pumping channel positioned in the annular sidewalls of each of the processing regions at a vertical position that is equal to or above an upper surface of the respective substrate support member; and

a single substrate transfer port formed in each of the processing region through an outer sidewall of the chamber body.

22. (Original) The processing chamber of claim 21, wherein the first and second gas distribution assemblies comprise a gas showerhead assembly.

23. (Previously Presented) The processing chamber of claim 22, wherein the gas showerhead assembly comprises:

a perforated plate positioned to dispense a processing gas into the respective processing regions from a front side; and

a gas distribution manifold positioned to supply a processing gas to a backside of the perforated plate.

24. (Cancelled).

25. (Previously Presented) The processing chamber of claim 21, further comprising a vacuum source in fluid communication with the annular pumping channel, the vacuum source being configured to cooperatively control the pressure in the first and second processing regions.

26. (Original) The processing chamber of claim 21, wherein the substrate support member comprises a heating element positioned in communication therewith.

27. (Previously Presented) The processing chamber of claim 21, wherein the first and second annular sidewalls share the interior wall.

28. (Currently Amended) A tandem vacuum processing chamber, comprising:

a chamber body having a bottom member and an interior wall extended from the bottom member;

first and second annular processing regions defined in the chamber body and bound by the common interior wall and the bottom member;

a first gas distribution assembly positioned above the bottom member and defining an upper boundary of the first annular processing region;

a second gas distribution assembly positioned above the bottom member and defining an upper boundary of the second annular processing region;

a fluid conduit positioned in communication with the first and second processing volumes and a vacuum source, the fluid conduit being configured to equalize the pressure between the respective processing regions;

a substrate support member positioned in each of the first and second processing regions, an outer portion of the substrate support member being parallel to an annular sidewall defining a lateral boundary of each of the processing regions; ~~and~~

an annular pumping channel positioned in the interior wall of the first and the second annular processing regions, wherein the annular pumping channel is vertically positioned above an upper surface of each substrate support member and below a lower surface of each gas distribution assembly; and

a single substrate transfer port formed in each of the processing region through an outer sidewall of the chamber body.

29. (Previously Presented) The processing chamber of claim 1, wherein the first and the second gas distribution assembly share a common gas source.

30. (Previously Presented) The processing chamber of claim 12, wherein the first and the second process region share gases from a common gas source.

31. (Previously Presented) The processing chamber of claim 21, wherein the first and the second gas distribution assembly share a common gas source.